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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/732,243	12/07/2000	Steven James Frisken	U013097-8	9498

7590
Ladas & Parry
26 West 61st Street
New York, NY 10023

01/13/2003

EXAMINER

CURTIS, CRAIG

ART UNIT PAPER NUMBER

2872

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/732,243

Applicant(s)
FRISKEN et al.

Examiner
Craig Curtis

Art Unit
2872



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 15, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____.
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 1. Claim 6 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.**

The specification fails to disclose the teaching in claim 6 of coupling means which, in use, couple said optical signal from an optical fibre and coupling said 90° polarisation rotated optical signal back into said optical fibre.

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Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5 and 7-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Kurata et al. (5,574,595).

Kurata et al. disclose the claimed invention: an optical device and method for producing a polarisation rotation of an optical signal, the device, arrived at via the implementation of said method, comprising:

a birefringent material (Fig. 1, birefringent material 5: col. 5, ll. 19-23) for, in use, splitting the optical signal into two orthogonal polarisation component signals;

a polarisation rotating means (Fig. 1, Faraday rotator 10: col. 5, ll. 11-12) for, in use, rotating each polarisation component signal by a predetermined amount (col. 5, ll. 36-40), and wherein the device is arranged in a manner such that, in use, the two rotated polarisation component signals are being combined by way of the birefringent material for providing the predetermined polarisation rotated optical signal (see Fig. 1);

wherein said polarisation rotation is by 90 degrees (upon passing twice through 10);

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wherein the polarisation rotating means comprises a nominally 45° Faraday rotator and an optical circuit arranged in a manner such that, in use, the polarisation component signals are being transmitted twice through the nominally 45° Faraday rotator (see Fig. 1);

wherein the optical circuit comprises a lens and a reflective element (Fig. 1, elements 13 and 14, respectively);

wherein the birefringent material comprises rutile (col. 5, ll. 19-23);

with regard to claim 13, please see the abstract, the device recitations having been met as set forth above.

Response to Arguments

3. Applicants' arguments filed 15 October 2002 have been fully considered but they are not persuasive.

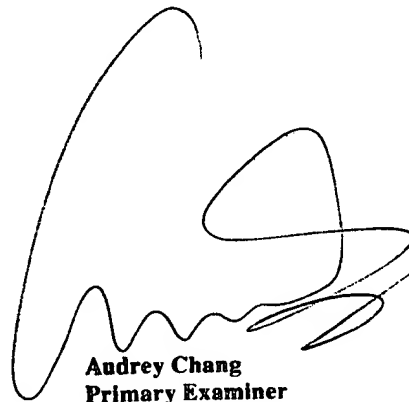
Applicants initially argue that the instant invention makes use of a single birefringent element, whereas the optical device taught by Kurata et al. makes use of at least two differing birefringent materials and, by extension, two different birefringent elements. While the examiner concedes that the claims of the instant invention do indeed set forth the use of a (read: single) birefringent material, the open-ended (i.e., ...comprising...), as opposed to closed-ended (i.e., ...consisting of...), character of the preambles of the claims admits the use of a reference having more than one birefringent element (and material) in the rejection of limitations reciting a single birefringent material/element.

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Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Craig Curtis, whose telephone number is (703) 305-0776. The facsimile phone number for Art Unit 2872 is (703) 308-7721.

Any inquiry of a general nature regarding the status of this application should be directed to the Group receptionist, whose telephone number is (703) 308-0956.

A stylized, handwritten signature in black ink, consisting of a large, sweeping loop followed by a series of smaller, connected loops and a final horizontal stroke.

**Audrey Chang
Primary Examiner
Technology Center 2800**

A handwritten signature in black ink, written in a cursive style, appearing to read 'Craig H. Curtis'.

**Craig H. Curtis
Group Art Unit 2872
10 January 2003**